

The invention provides a method and apparatus for creating and testing a channel decoder with built-in self-test. The method and apparatus consist of simulating any specified channel decoder architecture and operation. The simulated channel decoder is then modified for built-in self-test (BIST). A production test signal is created as a product of the modified channel decoder simulation. A channel decoder patterned after the modified channel decoder simulation is manufactured. The manufactured channel decoder is then tested using the production test signal and BIST.